

**REMARKS/ARGUMENTS**

In response to the Non-Final Office Action dated March 29, 2012 (OA), reconsideration is respectfully requested.

**Allowable Subject Matter**

Applicant acknowledges with thanks the Examiner's indication that claims 1, 2, 5, 7-12, 16, 18-22, 26, 27, 32, and 33 are allowed.

**Claim Rejections Under 35 U.S.C. §102**

Claims 28, 29, and 31 stand rejected under 35 U.S.C. §102(b) in view of U.S. Pat. No. 5,504,785 (Becker). It is believed that claims 28, 29, and 31 are patentable in view of Becker.

Independent claim 28 has been amended to recite an apparatus comprising means for receiving an original signal at the satellite, the original signal having a first center frequency and a first bandwidth and means for down-converting the original signal to the input signal, the input signal having a second center frequency equal to one-half of the first bandwidth plus a frequency margin, and the input signal having the first bandwidth. The amendment further clarifies that the input signal has a second center frequency equal to one-half of the first bandwidth which corresponds to the bandwidth of the original signal. Becker discusses a controllable digital filter operating as a narrow bandwidth filter to locate an unknown center frequency and unknown bandwidth of a signal presented to a receiver (col.7, lines 34-49). The digital filter locates the unknown center frequency by shifting the received center frequency in a series of frequency steps wherein the frequency step size is preferably equal to one-half of the filter's bandwidth. Becker does not teach, disclose, or suggest an apparatus comprising means for receiving an original signal at the satellite, the original signal having a first center frequency and a first bandwidth and means for down-converting the original signal to the input signal, the input signal having a second center frequency equal to one-half of the first bandwidth plus a frequency margin. For at least this reason, claim 28 is patentable over Becker.

Claims 29 and 31 depend from claim 28. Therefore, for at least the reasons presented above with regard to independent claim 28, dependent claims 29 and 31 are patentable over Becker.

**CONCLUSION**

In view of the foregoing, all claims now pending in this Application are believed to be in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

It is believed that the instant response is filed within the shortened statutory period for response provided in the Non-Final Office Action of March 29, 2012.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned.

Respectfully submitted,

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